Reading Assignment 15: Russell and Logicism

REQUIRED READINGS QUESTIONS

Russell 1993. Chapters 1 and 2.

- 1. In your own words, summarize Russell's distinction between mathematical philosophy and ordinary mathematics. Give an example of each.
- 2. According to Russell, what is the ``fairly recent'' discovery of mathematicians, and how did Pythagoras present an obstacle to this discovery?
- 3. According to Russell, what was Frege's contribution to mathematics and how was it related to nineteenth century analysts' attempts to ``arithmetize'' analysis?
- 4. For what two reasons does Russell think it's problematic to say the zero, number, and successor are simply whatever satisfy Peano's axioms?
- 5. Define ``similar'' and explain how Russell's definition of number employs the definition of ``similar.''

References

[1] B. Russell. Introduction to Mathematical Philosophy. United States: Dover Publications, 1993.